Appl. No. 10/058,540

Paper No. 4

In the Claims:

Please amend Claims 1, 3, 5, 8 and 12 as follows:

Please add Claims 45 and 46.

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1. (Amended) A suction system having a suction tube, a source of suction and a suction control valve, said suction control valve comprising: a housing having an upper surface and a first central linear passageway extending through said housing and in fluid flow communications at one end thereof with a suction tube and with a suction source at the other end thereof, said housing having a second passageway opening at said upper surface and transversing said first central linear passageway, a manually depressible and releasable plunger operable within said second passageway wherein said plunger includes a closed piston portion and an open, unobstructed, straight through lumen portion and is normally positioned within said first passage to a non-suction applied position where said piston portion is positioned across said first passageway to hermetically seal off fluid and air flow communication between said suction tube and said source of suction, said plunger further manually operable from said upper surface and depressible within said second passageway to a suction applied position where said open, unobstructed, straight through lumen portion is positioned in said first passageway and wherein there is unobstructed fluid and air flow communication between said suction tube and said source of suction, said plunger automatically returnable to its non-suction applied position upon manual release of said plunger.

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3. (Amended) The suction control valve of claim 1 wherein the plunger includes outer surfaces adapted for sealing engagement with said second passageway.

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5. (Amended) The suction system of claim 1 including a suction catheter and an actuator portion as part of the plunger, said first central linear passageway in fluid flow communication at one end with a suction catheter and at its other end with a suction source, said central passageway permitting unobstructed fluid and air flow between the suction catheter and the suction source, said plunger fitted within and hermetically sealed within the second passageway and the plunger depressably and releasably operable by the actuator within the second passageway wherein the plunger is normally positioned to a non-suction applied non-actuator depressed mode such that said unobstructed, straight through fluid flow cross lumen is sealed by contact with the walls of the second passageway to prevent fluid and air flow communication between the suction tube and the suction source, said plunger further operable within the second passageway wherein the plunger is positioned to a suction applied actuator depressed mode such that said unobstructed, straight through fluid flow cross lumen is unsealed and positioned within the first passageway to a fully open position to permit complete unobstructed fluid and air flow communication between the suction tube and the suction source.

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8. (Amended) A respiratory suction catheter system for suction secretions from a patient comprising: a frontal manifold configured for delivery of

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ventilator air to a patient, a rearward suction control valve adapted for attachment to a source of suction, a suction catheter assembly including a suction catheter disposed between and operatively connecting the frontal manifold and the rearward suction control valve, said suction control valve in fluid and air flow communication at one end thereof with the suction catheter and at its other end with the source of suction, said suction control valve comprising: a housing having an upper surface and a first central linear passageway extending through said housing and in fluid flow communications at one end thereof with a suction tube and with a suction source at the other end thereof, said housing having a second passageway opening at said upper surfaces and transversing said first central linear passageway, a manually depressible and releasable plunger operable within said second passageway wherein said plunger includes a closed piston portion and an unobstructed, straight through open lumen portion and is normally positioned within said first passage to a nonsuction applied position where said piston portion is positioned across said first passageway to hermetically seal off fluid and air flow communication between said suction tube and said source of suction, said plunger further manually operable from said upper surface and depressible within said second passageway to a suction applied position where said unobstructed, straight through open lumen portion is positioned in said first passageway and wherein there is unobstructed fluid and air flow communication between said suction tube and said source of suction, said

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plunger automatically returnable to its non-suction applied position upon manual release of said plunger.

12. (Amended) A respiratory suction catheter system for suctioning secretions from a patient comprising: a connector having front and rear ends and configured for delivery of ventilator air to and from a patient, a cleaning chamber disposed adjacent to the rear end of said connector, the cleaning chamber having an entrance opening, a catheter wiper and a catheter isolator seal, the entrance opening disposed at the distal end of the cleaning chamber and the catheter isolator seal disposed at the proximal end of the cleaning chamber and the catheter wiper disposed between the entrance opening and the catheter isolator seal, a suction catheter assembly having a housing connected at its front end to said cleaning chamber and having a catheter in turn having a proximal end and a distal end, said catheter advanceable and retractable through the connector via said cleaning chamber.

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45. A catheter suction system comprising; a catheter having a proximal end and a distal end, said catheter defining a lumen therethrough which communicates with a tip formed at said distal end of said catheter, a ventilator connector slidably engageable with said distal end of said catheter, a catheter cleaning chamber adjacent to said connector, said catheter cleaning chamber having a distal end and a proximal end and a catheter rinse port, a catheter isolation tunnel adjacent to the catheter cleaning chamber, a seal disposed at the proximal end of the

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catheter cleaning chamber to seal said catheter cleaning chamber from the catheter isolation tunnel, said seal openable solely by the slidable advancement of said catheter distal end tip acting upon said seal, a hermetically airtight sealed suction control valve secured to said proximal end of said catheter and in communication with a vacuum source, wherein when said tip is slidably advanced to open said seal and position said tip in disposition within the catheter cleaning chamber a rinse solution may then be instilled into said catheter cleaning chamber, and upon actuation of said suction control valve, the rinse solution is aspirated through said tip and said lumen and into a vacuum source to cleanse said catheter, said catheter retractable back through said seal into the catheter isolation tunnel upon completion of the cleansing action.

46. A closed tracheal suction system for delivering repeated suctioning procedures through a frontal ventilator connector wherein the system thoroughly rinses and cleans the catheter after each suctioning procedure to prevent the accumulation and re-introduction of catheter secretions within the frontal connector into a patient's airway comprising; a catheter having a proximal end and a distal end, said catheter defining a lumen therethrough which communicates with a tip formed at said distal end of said catheter, a frontal ventilator connector slidably engageable with said distal end of said catheter, a catheter cleaning chamber adjacent to said connector, said catheter cleaning chamber having a distal end and a proximal end and a catheter rinse port, a catheter isolation tunnel adjacent to the catheter cleaning

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chamber, a seal disposed at the proximal end of the catheter cleaning chamber to seal said catheter cleaning chamber from the catheter isolation tunnel, a hermetically airtight sealed suction control valve secured to said proximal end of said catheter and in communication with a vacuum source, wherein when said catheter distal end tip is disposed within the catheter cleaning chamber a rinse solution may then be instilled into said catheter cleaning chamber, and said catheter cleaning chamber configured to prevent instilled rinse solution and secretions from entering the adjacent connector and when said suction control valve is activated the rinse solution is aspirated through said tip and said lumen and into a vacuum source to cleanse said catheter and said catheter retractable back through said seal and into the catheter isolation tunnel upon completion of the cleansing of the catheter.